



# New Informative Features for Fault Diagnosis of Industrial Systems by Supervised Classification

Submitted by Emmanuel Lemoine on Thu, 01/30/2014 - 14:53

Titre	New Informative Features for Fault Diagnosis of Industrial Systems by Supervised Classification
Type de publication	Communication
Type	Communication avec actes dans un congrès
Année	2009
Langue	Anglais
Date du colloque	2009
Titre du colloque	Workshop on Advanced Control and Diagnosis, ACD'09
Auteur	Verron, Sylvain [1], Tiplica, Téodor [2], Kobi, Abdessamad [3]
Pays	Pologne
Ville	Zielona Gora
Mots-clés	Bayesian [4], fault [5], supervised [6]
Résumé en anglais	<p>The purpose of this article is to present a method for industrial process diagnosis. We are interested in fault diagnosis considered as a supervised classification task. The interest of the proposed method is to take into account new features (and so new informations) in the classifier. These new features are probabilities extracted from a Bayesian network comparing the faulty observations to the normal operating conditions. The performances of this method are evaluated on the data of a benchmark example: the Tennessee Eastman Process. Three kinds of fault are taken into account on this complex process. We show on this example that the addition of these new features allows to decrease the misclassification rate.</p>
Notes	Date du colloque : 11/2009
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua1693">http://okina.univ-angers.fr/publications/ua1693</a> [7]

---

## Liens

- [1] <http://okina.univ-angers.fr/sylvain.verron/publications>
- [2] <http://okina.univ-angers.fr/teodor.tiplica/publications>
- [3] <http://okina.univ-angers.fr/a.kobi/publications>
- [4] [http://okina.univ-angers.fr/publications?f\[keyword\]=4386](http://okina.univ-angers.fr/publications?f[keyword]=4386)
- [5] [http://okina.univ-angers.fr/publications?f\[keyword\]=4441](http://okina.univ-angers.fr/publications?f[keyword]=4441)
- [6] [http://okina.univ-angers.fr/publications?f\[keyword\]=4591](http://okina.univ-angers.fr/publications?f[keyword]=4591)
- [7] <http://okina.univ-angers.fr/publications/ua1693>

Publié sur *Okina* (<http://okina.univ-angers.fr>)